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Drivers of Empowerment and Performance among Youth Agripreneurs in Jigawa State of Nigeria

Abstract. Youth engagement in agribusiness is a strategic priority for addressing unemployment and ensuring food security in Nigeria. However, the persistence of high failure rates among youth-led enterprises suggests that conventional support models, predominantly focused on financial provision, are insufficient. Therefore, this study investigates the multidimensional drivers of empowerment and performance among youth agripreneurs in Jigawa State, Nigeria. The study employed a cross-sectional survey design, collecting data from 286 young agribusiness entrepreneurs selected through a multistage sampling technique. The survey was conducted in the year 2025, and it lasted for a period of three months (May-July). An easy-cost-route approach, a well-structured questionnaire complemented with an interview schedule, key informants, and a focus group discussion were the tools used for information synthesis. Furthermore, a structural equation model (SEM) was used to analyse the relationships within four theoretical frameworks: the Agripreneurship Empowerment Dimension Theory (AEDT), the Youth Agency Dimension Theory (YADT), the Youth Agripreneurship Performance Theory (YAPT), and the Agripreneurship Resource Construct (ARC). The results revealed that psychological empowerment and self-efficacy were the strongest and most significant predictors of empowerment, far surpassing the impact of economic factors, which were statistically insignificant. Political empowerment and autonomy also showed significant positive effects. Regarding performance, customer-oriented factors and social resources, such as networks and mentorship, were the most critical drivers, while financial resources alone showed no significant direct effect. The study concludes that empowerment and performance are intrinsically linked to intrinsic psychological assets and social capital rather than purely financial inputs. Consequently, it recommends a paradigm shift in policy and practice towards integrated interventions that prioritise mindset development, leadership training, political inclusion, and the strengthening of social networks to build resilient and empowered youth agripreneurs capable of transforming Jigawa State's agricultural landscape.

Keywords: agripreneurship, empowerment, performance, youth, SEM, Jigawa State, Nigeria

JEL Classification: M20, O12, O13, Q12

Introduction

Background of the Study

Youth engagement in agriculture is widely recognised as a critical pathway to sustainable economic development, food security, and poverty reduction in sub-Saharan Africa (SSA) (Kote et al., 2024; Geza et al., 2021). Despite the sector's immense potential, many African economies, including Nigeria, face a paradox: a burgeoning youth population simultaneously experiencing high unemployment rates and a pervasive aversion to careers in agriculture (Consentino et al., 2023). This aversion is often fuelled by the perception of

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agriculture as a rudimentary, low-status, and high-risk venture characterised by inadequate financial returns and difficult working conditions (Adeyanju et al., 2021).

In response, governments and development agencies have initiated numerous programmes aimed at incentivising youth participation through financial support, training, and policy interventions. However, the success of these initiatives has been mixed. A growing body of literature suggests that traditional approaches, which often prioritise economic inputs, fail to address the multidimensional nature of youth empowerment and performance (Shaari et al., 2025; Okolo-obasi & Uduji, 2023; Twumasi et al., 2019). Empowerment is not merely a function of capital access; it is a complex construct encompassing psychological, social, and political dimensions that collectively influence an individual's capacity to make strategic life choices and act upon them (Isaacs et al., 2007).

In northern states such as Jigawa, agriculture dominates local economic activity, with more than 80% of households depending on farming as their primary occupation (Sadiq et al., 2024a&b; Sadiq & Sani, 2024). Despite its potential, agriculture faces challenges including limited access to finance, weak infrastructure, and poor market systems, which constrain productivity and discourage youth engagement (Sadiq et al., 2024a&b).

Youth empowerment through agribusiness has recently gained traction as a strategic response to unemployment, food insecurity, and rural poverty. Programmes such as the Fadama Graduate Unemployed Youth Support (FGUYS) and Poultry Empowerment Initiatives in Jigawa have been implemented to integrate young people into profitable agricultural ventures (Adeyanju et al., 2021; Osabohien et al., 2021). Evidence suggests that when youths are supported with skills, networks, and resources, they demonstrate resilience, innovation, and capacity to sustain agribusinesses (Babu et al., 2020). However, their full potential remains underutilised due to systemic and institutional barriers.

In Nigeria, and specifically in Jigawa State, understanding these nuanced drivers is essential. Agripreneurship presents a viable solution to youth unemployment, but its sustainability hinges on a deeper comprehension of what truly empowers young agripreneurs and enables their enterprises to thrive beyond initial support.

Problem Statement

Youth unemployment in Nigeria has reached alarming levels, with rural areas like Jigawa State experiencing high rates of poverty and outmigration despite vast agricultural potential. Many young people perceive agriculture as an unattractive, low-status occupation due to cultural attitudes, poor infrastructure, and limited financial returns (Adeyanju et al., 2021a). Even where empowerment programmes exist, challenges such as inadequate access to credit, weak political inclusion, and the lack of supportive social networks hinder youth participation and performance.

Despite significant investments and policy attention, youth participation in agribusiness in Jigawa State remains suboptimal, with many ventures failing to achieve sustainability and scale. A critical gap exists between the provision of support—primarily financial—and the actual empowerment and performance outcomes for youth. Existing interventions often operate on the assumption that economic resources are the primary catalyst for success, overlooking the foundational roles of psychological capital, social networks, and political agency (Garbero & Jackering, 2021; Ninson & Brobbey, 2023).

Specifically, in Jigawa State, studies highlight that while youth participate in government empowerment programmes, their long-term success in agribusiness is inconsistent, with many dropping out due to weak institutional support and insufficient

entrepreneurial capacity (Adeyanju et al., 2021a). This raises concerns about the sustainability of youth empowerment efforts and the need for multidimensional approaches that address not only financial resources but also psychological, social, and political dimensions of empowerment.

Consequently, there is a pressing need to move beyond monolithic support models and instead investigate the specific dimensions of empowerment—such as psychological resilience, political inclusion, and social capital—that most effectively drive youth success. The problem, therefore, is the lack of an empirically-grounded understanding of the differential impacts of various empowerment dimensions (AEDT, YADT) and resource types (ARC, YAPT) on youth agripreneurship in Jigawa State. Without this knowledge, policies and programmes risk being misaligned with the actual needs and drivers of success for young agripreneurs.

Justification for the Study

This study is justified by its potential to provide an evidence-based framework for designing more effective, multidimensional youth interventions in Jigawa State and similar contexts. By applying established theoretical frameworks like the Agripreneurship Empowerment Dimension Theory (AEDT), the Youth Agency Dimension Theory (YADT), the Youth Agripreneurship Performance Theory (YAPT), and the Agripreneurship Resource Construct (ARC), this research moves beyond anecdotal evidence to quantify the specific pathways to empowerment and performance.

The findings, which reveal the paramount importance of psychological empowerment and self-efficacy over purely financial support, challenge conventional intervention strategies. This research provides crucial insights for policymakers, development partners, and educational institutions. It argues for a reallocation of resources towards building human capital, strengthening social networks, enhancing political voice, and fostering resilient mindsets, thereby creating a more enabling ecosystem for youth agripreneurs.

Ultimately, this study contributes to filling a critical knowledge gap in youth agricultural development literature. It offers a replicable model for understanding agripreneurship dynamics and provides actionable recommendations to transform youth agribusiness from a subsistence activity into a viable, empowering, and high-performance career choice in Jigawa State and across Nigeria.

Research Objectives

The broad objective of this research is to investigate the multidimensional drivers of empowerment and performance among youth agripreneurs in Jigawa State, Nigeria. The specific objectives are: (i) to determine the empowerment status of youths participating in agribusiness; and (ii) to determine the performance status of youths participating in agribusiness in the study area.

Literature Review

Theoretical Framework

This study is guided by four interrelated theories that explain how youth empowerment translates into agripreneurship performance: the Agripreneurship Empowerment Dimension

Theory (AEDT), the Youth Agency Dimension Theory (YADT), the Youth Agripreneurship Performance Theory (YAPT), and the Agripreneurship Resource Construct/Theory (ARC). Together, these frameworks provide a multidimensional lens for understanding empowerment outcomes among youths in agribusiness in Jigawa State (Figure 1).

1. Agripreneurship Empowerment Dimension Theory (AEDT)

AEDT emphasises empowerment as a four-dimensional construct: psychological, political, economic, and social empowerment. Psychological empowerment—rooted in confidence, resilience, and motivation—forms the strongest driver of success. Political empowerment relates to inclusion in policies and decision-making, while economic empowerment highlights financial access and market opportunities. Social empowerment underscores networks and cultural perceptions. Studies show that mindset and psychological resilience are often more decisive than material resources in sustaining agripreneurship (Shaari et al., 2025).

2. Youth Agency Dimension Theory (YADT)

YADT frames empowerment around autonomy, participation, self-efficacy, and voice. Autonomy empowers youth to make independent business choices; participation involves collaboration in cooperatives and training; self-efficacy reflects confidence in one's abilities; and voice represents the ability to influence higher-level decisions. Evidence indicates that self-efficacy is the most significant predictor of empowerment, while voice often remains underdeveloped due to institutional and cultural barriers (Adeyanju et al., 2021b).

3. Youth Agripreneurship Performance Theory (YAPT)

YAPT explains youth performance in agribusiness through four pillars: customer orientation, finance, growth, and operational efficiency. Customer engagement—satisfying consumer needs, maintaining quality, and building loyalty—is the strongest driver of success. Finance and operational efficiency also matter, but are weaker predictors if not coupled with managerial capacity. Research shows that customer focus and adaptive marketing strategies enhance youth agribusiness survival (Adesina &Eforuoku, 2016; Adeyanju et al., 2021b).

4. Agripreneurship Resource Construct/Theory (ARC)

ARC views agripreneurship through resource-based factors: financial, human, physical, and social capital. Human resources—skills, knowledge, and entrepreneurial orientation—are pivotal for resilience and innovation. Physical resources like land and equipment improve efficiency, while social resources such as mentorship and networks strengthen market access and bargaining power. Financial resources alone have a limited impact unless paired with capacity building and social capital (Adeyanju et al., 2021a).

Integration of Theories

AEDT and YADT address empowerment dimensions (mindset, agency, inclusion), while YAPT and ARC explain how these empowerment factors lead to business performance (customer engagement, growth, operational strength). Their integration provides a holistic framework for assessing not just whether youths are empowered, but how empowerment translates into sustainable agribusiness outcomes in Jigawa State. In other words, these four theories provide the foundational lenses through which the empowerment and performance of youth agripreneurs in Jigawa State are analysed in this study.

Conceptual Framework

This framework integrates four theories – the Agripreneurship Empowerment Dimension Theory (AEDT), the Youth Agency Dimension Theory (YADT), the Youth

Agripreneurship Performance Theory (YAPT), and the Agripreneurship Resource Construct (ARC) – to explain youth empowerment and performance in agribusiness. AEDT and YADT highlight the multidimensional nature of empowerment, focusing on psychological, political, social, and agency-related drivers. YAPT and ARC emphasise how customer orientation, operational efficiency, and resource access translate empowerment into tangible agripreneurship outcomes. Together, the framework demonstrates that sustainable youth agripreneurship in Jigawa State requires both internal empowerment (self-efficacy, mindset, autonomy) and external enablers (networks, resources, supportive policies) for lasting performance and development impact.

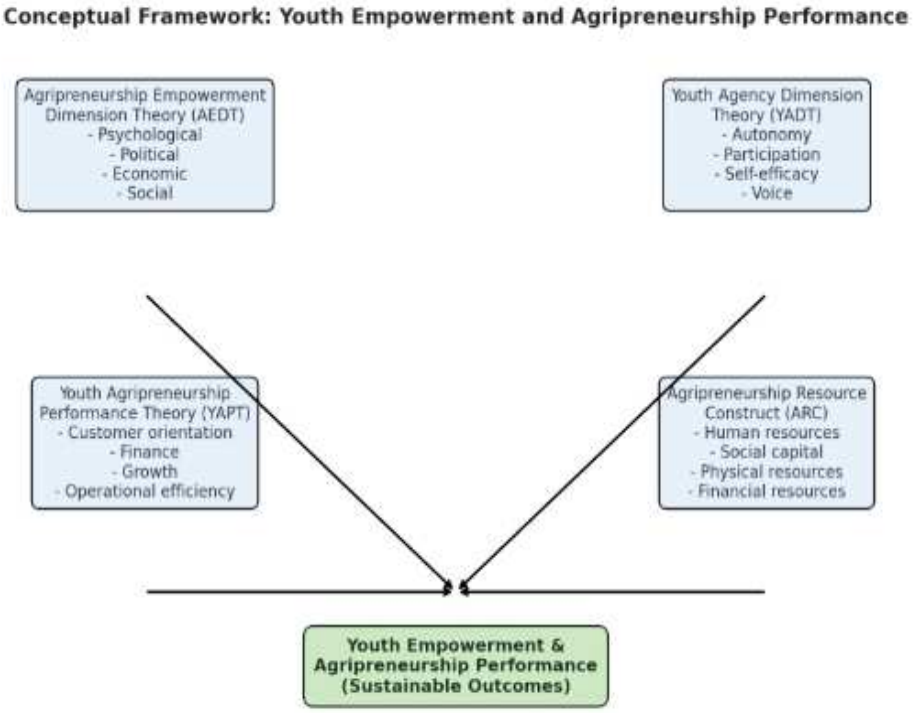

Fig. 1. Conceptual framework

Source: Python software, 2025.

Empirical Review

A growing body of empirical evidence has explored youth empowerment and agripreneurship in Nigeria and across Africa. These studies highlight empowerment as a multidimensional construct shaped by psychological, social, political, and economic factors, while agribusiness performance is driven by customer focus, resources, and institutional support.

Adeyanju et al. (2021a&b) empirically assessed agricultural training programmes in Nigeria and found that youth participation significantly improved entrepreneurial skills, self-

efficacy, and agripreneurship performance. Similarly, Adeyanju (2023) demonstrated that empowerment interventions under ENABLE-TAAT enhanced business confidence, though voice and advocacy capacities remained weak.

Ikebuaku (2021) and Nuhu (2021) employed a capability approach and showed that psychological empowerment and agency (autonomy and self-efficacy) were critical in shaping entrepreneurial intentions among Nigerian youth. Boye et al. (2024) also found that entrepreneurial traits moderated willingness to engage in agribusiness, underscoring the role of mindset in empowerment.

Research by Haji et al. (2022) and Benton (2025) underscores psychological empowerment—particularly self-confidence and resilience—as the most critical driver of successful entrepreneurial outcomes, often outweighing initial financial inputs.

The significance of political empowerment is evidenced by Adeyanju (2023) and Chiang (2023), who found that access to structured programmes and policy platforms enhances resource access and legitimacy for young agripreneurs. Conversely, studies indicate that economic empowerment alone shows limited impact. Brooks et al. (2013) and Msangi et al. (2024) observed that financial support without complementary capacity building often fails to sustain youth engagement in agriculture.

Awobajo et al. (2025) examined agribusiness clusters in Southwest Nigeria and found that youth policy engagement and cooperative participation enhanced sustainable practices. Kansiime et al. (2025) further highlighted digital platforms like FarmCrowdy as facilitators of youth empowerment, enabling stronger market access and social capital formation.

Empirical studies consistently stress that access to finance alone does not guarantee agribusiness success. Songca et al. (2024) found that financial empowerment was insignificant without complementary training and social capital. Similarly, Abdullahi et al. (2025) reported that agricultural students in Northwestern Nigeria valued skills and institutional support more than access to credit in shaping willingness to pursue agribusiness.

Regarding performance, Adeyanju et al. (2021) identify customer-oriented practices and social resources—such as networks and mentorship—as vital to enterprise success. This aligns with Abrahman et al. (2021), who stress the importance of passion-driven skill development (human resources) and identify physical infrastructure as a key enabler, though often constrained by access limitations.

A recurring theme across studies, including Ninson & Brobbey (2023), is that socio-cultural barriers—such as the perception of agriculture as a low-status career—can inhibit youth participation and limit the effectiveness of social networks. Furthermore, Herani & Pranandari (2024) note that a lack of voice and advocacy skills often prevents youth from translating individual capabilities into systemic influence.

Evidence from Songca et al. (2024) showed that agribusiness empowerment programmes improved income and resilience among youth agripreneurs across Africa, including Nigeria. Stanley and Tochi (2025) demonstrated that ecopreneurship practices enhanced sustainability and long-term profitability among young agripreneurs in Southwest Nigeria. Likewise, Awotodunbo et al. (2025) confirmed that integrated agribusiness hubs created sustainable employment opportunities but stressed the need for combining financial and human resource development.

Beyond Nigeria, Ouko et al. (2022) and Akrong & Kotu (2022) showed that youth agripreneurship in Kenya and Benin improved employment creation and food security, reflecting similar challenges of finance, skills, and institutional barriers. These findings

resonate with Nigerian contexts, reinforcing that empowerment is most effective when combining self-efficacy, skills training, and social networks.

Collectively, this empirical literature confirms that effective youth agripreneurship support requires a holistic approach integrating psychological, political, social, and human resource dimensions, rather than focusing predominantly on economic interventions.

Research Methodology

Jigawa State, located in northwestern Nigeria, was created in 1991 from the northeastern part of Kano State (Sadiq et al., 2024a). It lies between latitudes 11°N and 13°N and longitudes 8°E and 10.15°E, sharing an international boundary with the Republic of Niger and domestic borders with Kano, Katsina, Bauchi, and Yobe States (Sadiq et al., 2024b) (Figure 2). The state covers about 23,154 square kilometres and has a projected population of 6.7 million people as of 2025 based on a 3% annual growth rate. With over 60% of its population under 35 years, Jigawa has a predominantly youthful demographic. The Hausa and Fulani ethnic groups dominate, and Islam is the major religion. Ecologically, the state falls within the Sudano-Sahelian zone, characterised by a long dry season and a short rainy season (Sadiq & Sani, 2024). Rainfall ranges between 600 mm and 1,000 mm annually, while temperatures vary from 21°C to 38°C. The vegetation is largely savannah grassland interspersed with shrubs, making it suitable for farming and livestock. Agriculture is the backbone of the economy, employing more than 80% of the working population (Sadiq et al., 2024a; Adeyanju et al., 2021b). Major crops include millet, sorghum, rice, maize, cowpea, and groundnut, while irrigation supports wheat and vegetable production. However, climatic variability and recurrent droughts pose significant risks to agricultural productivity.

Despite agriculture being a core sector, it faces challenges such as limited access to modern inputs, underdeveloped value chains, and high youth unemployment rates (Sadiq & Sani, 2023). The state government has initiated programmes like the Jigawa State Youth Empowerment Programme to stimulate agribusiness engagement, yet sustainable outcomes remain hindered by structural and resource constraints.

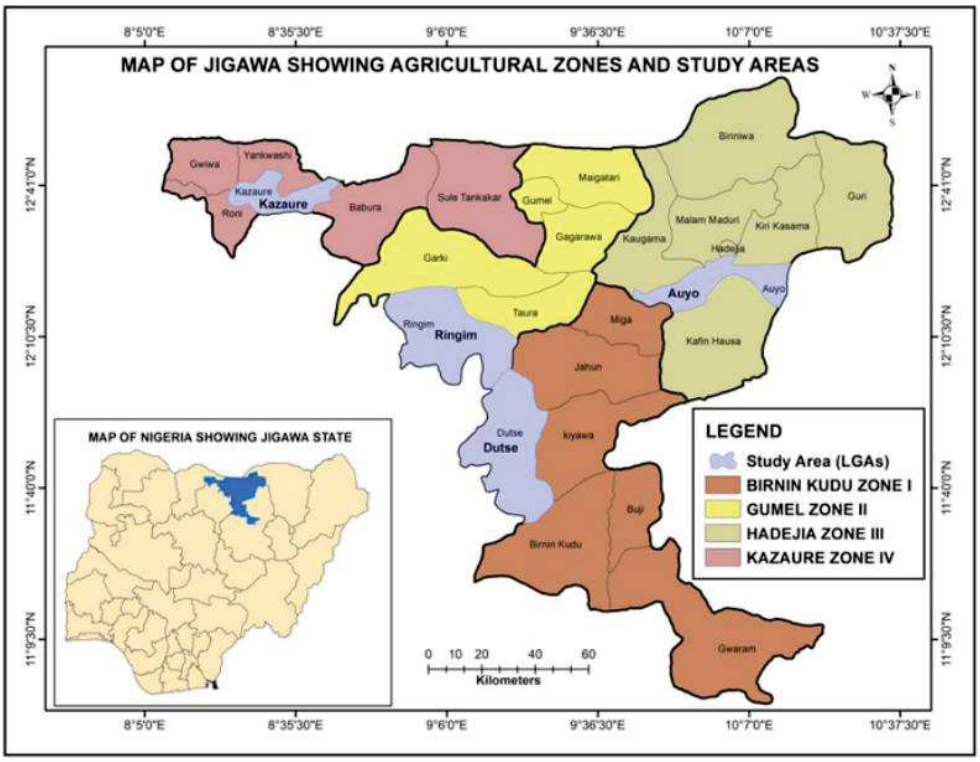

Fig. 2. Map of the study area

Source: Authors' own design, 2025.

The study focused on youths actively involved in small agribusiness within Jigawa State. To achieve a representative sample, a multistage sampling technique was adopted. In line with the stratification of the state by the Jigawa Agricultural and Rural Development Authority (JARDA), the four agricultural zones—Birnin Kudu, Hadejia, Kazaure, and Gumel—were used as the first stage of selection (Figure 2). One Local Government Area (LGA) was then purposively chosen from each zone, based on the high presence of agripreneurship-oriented youths.

From the selected LGAs, three communities were randomly drawn, giving a total of twelve communities: Dutse, Kudai, Chamo, Ringim, Chai-Chai, Sankara, Kazaure, Gada, Tsohon Kafi, Auyo, Gamsarka, and Gamafoi. Furthermore, a reconnaissance survey was conducted to validate community selections, collect preliminary information, and ensure an accurate understanding of the youth population distribution across the study areas.

Cochran's sample size determination formula was applied, resulting in a final sample of 264 youths. The sampling frame was obtained from JARDA's official register of eligible agribusiness participants, from which respondents were randomly selected (Table 1). This process ensured that the study captured a diverse and representative group of youth agripreneurs across the state.

Furthermore, by adopting an easy-cost-route approach, a well-structured questionnaire complemented with an interview schedule, key informants, and a focus group discussion were used to elicit valid information from a cross-sectional survey targeting young agripreneurs in the year 2025 (May-July). A desk review – using journals, books, manuals, etc.—was used to elicit information that supports empirical review. Moreover, using SEM as a precursor, all the specified objectives were unambiguously achieved.

Table 1. Sampling frame of youth agripreneurs in the study area

Zones	LGA	Communities	Sample frame	Sample size
Birnin kudu	Dutse	Kudai	800	18
		Dutse	1300	30
		Chamo	900	20
Gumel	Ringim	Sankara	950	21
		Ringim	1000	22
		Chai chai	800	18
Kazaure	Kazaure	Kazaure	1000	22
		Gada	800	18
		Tsohon kafi	700	16
Hadejia	Auyo	Auyo	1500	34
		Gamsarka	1200	27
		Gamafoi	800	18
Total			11,500	264

Source: JARDA, 2023; Reconnaissance survey, 2023.

Cochran's Sampling Formula:

$$n_0 = \frac{Z^2 * P * (1-P)}{e^2} \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where:

n_0 = initial sample size;

Z = Z statistic corresponding to the desired confidence level (90% =1.645);

p = estimated proportion of the population with the attribute of interest (if unknown, 0.5 is used for maximum variability);

$q = 1 - P$ (proportion without the attribute);

e = degree of freedom (5%).

Adjusted for finite population:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}} \qquad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where:

n = total sample size;

N = total population size;

n_0 = initial sample size from the first formula.

Empirical Review

Structural equation model (SEM): SEM is a statistical technique used to analyse complex relationships among observed and latent (unobserved) variables. It uses confirmatory factor analysis to model both direct and indirect effects between variables. SEM helps researchers test theoretical models that describe how constructs are related, allowing for hypothesis testing, measurement validation, and causal inferences using model fit indices such as CFI, RMSEA, and χ^2.

1. Agripreneurship Empowerment Dimension Theory (AEDT)

This theory considers four empowerment dimensions: Psychological (Psy), Political (Pol), Economic (Eco), and Social (Soc).

$$Emp = \beta_1 Psy + \beta_2 Pol + \beta_3 Eco + \beta_4 Soc + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (3)$$

Where:

Emp = overall empowerment of youth

$\beta_1 \ldots\ldots\ldots \beta_4$ = path coefficients (strength of each factor)

ε = error term

2. Youth Agency Dimension Theory (YADT)

This theory uses Autonomy (Aut), Participation (Par), Self-Efficacy (SE), and Voice (Vo).

$$Emp = \beta_5 SE + \beta_6 Aut + \beta_7 Par + \beta_8 Vo + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

Where:

Emp = empowerment through agency;

$\beta_5 \ldots\ldots\ldots \beta_8$ = regression weights.

3. Youth Agripreneurship Performance Theory (YAPT)

Performance is measured by Customer (Cus), Finance (Fin), Growth (Gro), and Operations (Op).

$$Perf = \beta_9 Cus + \beta_{10} Fin + \beta_{11} Gro + \beta_{12} Op + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (5)$$

Where:

Perf = agripreneurship performance;

$\beta_9 \ldots\ldots\ldots \beta_{12}$ = regression coefficients.

4. Agripreneurship Resource Construct (ARC)

Performance depends on Financial (FinR), Human (HumR), Physical (PhyR), and Social (SocR) resources.

$$Perf = \beta_{13} Cus + \beta_{14} Fin + \beta_{15} Gro + \beta_{16} Op + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots (6)$$

Where:

Perf = youth agribusiness performance;

$\beta_{13} \ldots\ldots\ldots \beta_{16}$ = path coefficients.

Results and Discussion

Empowerment Status of Youths Participating in Agribusiness Enterprises

Youths' empowerment status based on the Agripreneurship Empowerment Dimension Theory (AEDT)

This section explores how empowered young people feel in their agribusiness activities, using the AEDT framework, which looks at four key dimensions: psychological, political, economic, and social empowerment (Table 2 and Figure 2).

The results show that psychological empowerment is by far the strongest driver of overall empowerment ($\beta = 0.500$, $p < 0.001$). In other words, the young people who believe in their own abilities, stay resilient through challenges, and feel motivated are the ones most likely to succeed and sustain their businesses. This echoes what Okolo-obasi & Uduji (2023) found, namely that self-confidence and decision-making skills are the real engines of turning opportunities into results. It also supports Shaari et al. (2025), who argued that while external barriers like a lack of funds and infrastructure can discourage youth, a strong belief in one's capacity to succeed often pushes them forward despite the odds. Simply put, mindset matters the most as it is the foundation on which other forms of empowerment rest.

Political empowerment also shows a significant and positive effect ($\beta = 0.237$, $p = 0.003$). This means that when young people are included in policies, given access to government programmes, or represented in decision-making bodies, their sense of empowerment grows noticeably. This finding is consistent with Garbero and Jackering (2021), who showed that access to structured agricultural programmes through political platforms often improves food security and resource access. In Jigawa State, being politically empowered gives youth more legitimacy and leverage—it helps them push through systemic barriers to finance, training, and markets.

Furthermore, economic empowerment ($\beta = 0.069$, $p = 0.383$) is positive but not statistically significant. While income, market access, and capital are important, the results suggest that money alone is not enough to make youth feel fully empowered. Similar to what Brooks et al. (2013) observed, even when young people get financial injections, many eventually abandon agriculture if they lack capacity-building support. Isaacs et al. (2007) also emphasised that finance must be paired with skills like business planning and entrepreneurship training before it translates into real empowerment. In the AEDT framework, this means that money is a resource, but without skills and structures, it doesn't create lasting change.

Finally, social empowerment comes out slightly negative and not significant ($\beta = -0.062$, $p = 0.387$). This suggests that the social networks that youth currently rely on in Jigawa State are not helping them to move forward. Weak or fragmented networks or cultural norms that discourage innovation and risk-taking may be limiting their positive impact. Shaari et al. (2025) made a similar observation, noting how cultural attitudes often frame agriculture as a low-status career. This can undermine the potential benefits of community affiliation and weaken motivation, as also highlighted by Ninson & Brobbey (2023). Nevertheless, the diagnostic test results confirm the fitness of the confirmatory factor analysis for the specified theories (Table 6).

When compared with other studies across Africa, these findings show an interesting pattern. For example, Magagula (2019) found that youth tend to view agriculture positively when they are exposed to it through education and receive proper financial support, but structural barriers like limited affordable credit and unstable markets often push youth away from farming into other careers. What stands out in Jigawa State, however, is that while these economic and social barriers remain real, strengthening psychological resilience and political engagement seems to have the most immediate and powerful impact on youth empowerment.

In summary, empowerment in Jigawa's youth agribusiness sector is multidimensional but uneven. Psychological empowerment is the strongest pillar, followed by political empowerment, while economic and social empowerment are weaker. For policy and practice, this means three things: investment in mindset and leadership development helps youth build confidence, problem-solving ability, and risk tolerance; strengthening political inclusion so that youth voices shape agricultural policies; and resource allocation. Coupled with financial support, social networks, training and capacity-building translate into meaningful empowerment. By focusing on these areas, interventions can create not just short-term fixes but sustainable pathways for youth to thrive as empowered agripreneurs in Jigawa State.

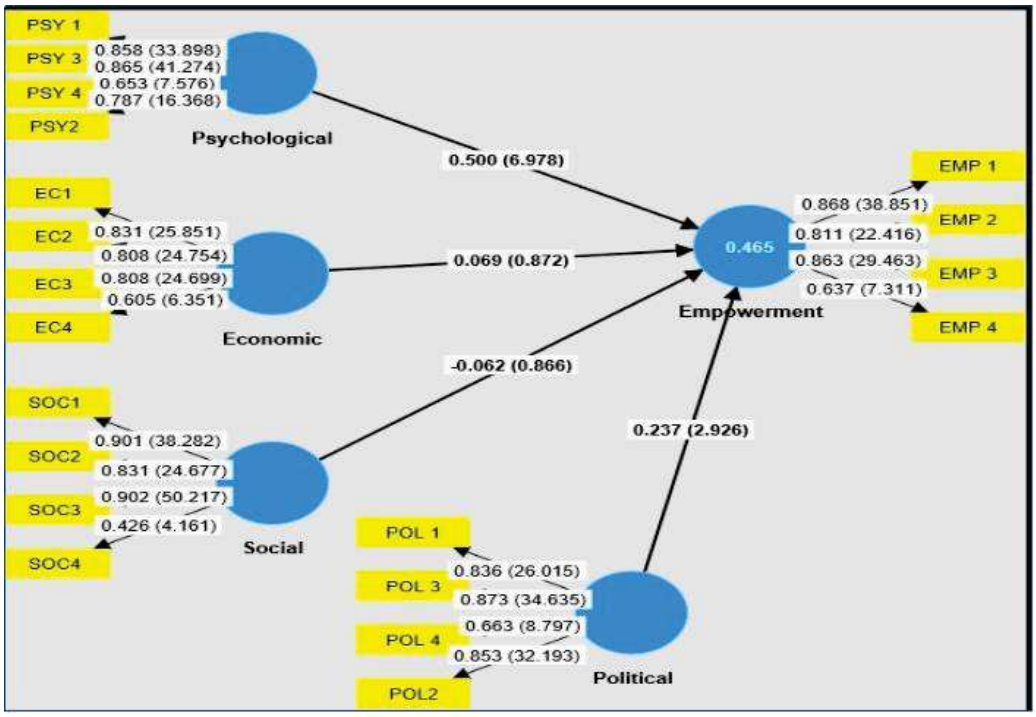

Fig. 2. SEM showing youths' empowerment status based on AEDT

Source: authors' own calculations.

Table 2. Youths' empowerment status based on AEDT

Construct	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STD)	P values
Economic -> Empowerment	0.069	0.069	0.079	0.872^{NS}	0.383
Political -> Empowerment	0.237	0.241	0.081	2.926***	0.003
Psychological -> Empowerment	0.500	0.498	0.072	6.978***	0.000
Social -> Empowerment	-0.062	-0.062	0.072	0.866^{NS}	0.387

Note: *** ($p \leq 0.001$), ** ($p \leq 0.05$), * ($p \leq 0.01$) & NS mean 1, 5, 10% and non-significant, respectively.

Source: Field survey, 2025.

Youths' empowerment status based on the Youth Agency Dimension Theory (YADT)

The results in Table 3, guided by the Youth Agency Dimension Theory (YADT), show that youth empowerment in small agribusiness enterprises in Jigawa State is shaped by four key dimensions: autonomy, participation, self-efficacy, and voice (see Figure 3). These dimensions do not contribute equally. Some are clear drivers of empowerment, while others remain weak due to social and structural barriers.

Autonomy has a significant positive effect ($\beta = 0.136$, $p = 0.036$). This means that young people who are able to make their own choices, such as deciding what crops to grow, how to run their farms, or how to manage finances, feel more empowered. Autonomy gives them a sense of ownership and control, turning them from passive participants in externally run programmes into active decision-makers. As Falaye (2020) noted, many Nigerian youths value agripreneurship precisely because it offers independence, flexibility, and the potential for financial freedom.

Participation also shows a significant positive impact ($\beta = 0.125$, $p = 0.048$). Engagement in cooperatives, farmer associations, and training groups gives youth access to collective knowledge, stronger networks, and opportunities to influence decisions. Participation is more than just showing up; it's about being actively involved in shaping agricultural activities and outcomes. Adeyanju et al. (2023) stressed that when training programmes are relevant and engaging, participation becomes a powerful empowerment tool. For youth in Jigawa, participation is helping them gain visibility in value chains, strengthen their bargaining power, and build a collaborative influence.

The strongest result comes from self-efficacy ($\beta = 0.624$, $p < 0.001$). This is by far the most powerful predictor of empowerment, showing that belief in one's own ability is the cornerstone of success in agribusiness. Youth with high self-efficacy are more resilient, persistent, and innovative, which allows them to withstand market fluctuations, climate challenges, and financial uncertainty. Okolo-obasi & Uduji (2023) also found that confidence and decision-making ability are critical outcomes of youth involvement in agribusiness. In this study, self-efficacy not only drives empowerment directly but also reinforces other dimensions, giving confidence that youth are more likely to exercise autonomy, engage in groups, and seek platforms to express themselves.

However, voice does not have a significant effect ($\beta = 0.064$, $p = 0.384$). This means that while youth may feel confident and active within their own ventures, their ability to influence larger policies or advocate for their interests at higher levels remains limited.

Cultural norms that undervalue youth voices and weak institutional structures likely explain this muted impact. Ray et al. (2022) also observed that gaps in communication and advocacy skills further reduce youth's ability to push for systemic change. Broader social perceptions that agriculture is a "low-status" career compound this challenge.

Generally, the findings show that in Jigawa State, empowerment is being driven mainly from within: self-efficacy, autonomy, and participation are strong and significant, but voice is still underdeveloped. This creates an imbalance. Youth are building confidence, decision-making skills, and collaborative networks, yet they lack the platforms and structures to translate these strengths into systemic influence. To close this gap, policies and programmes should focus on: strengthening self-efficacy through mentorship, role models, and entrepreneurial training; expanding autonomy by giving youth more decision-making power in resource use and reducing bureaucratic barriers; enhancing participation by encouraging cooperative membership, peer-to-peer learning, and youth-focused professional associations; amplifying voice by institutionalising youth representation in agricultural policy forums; supporting advocacy groups, and building leadership and communication skills.

In short, the study shows that empowerment is real and growing among youth in Jigawa's agribusiness sector, but it is still more personal than political. For empowerment to be sustainable, youth must not only feel confident and capable but also be heard and represented in shaping the agricultural systems that affect their lives.

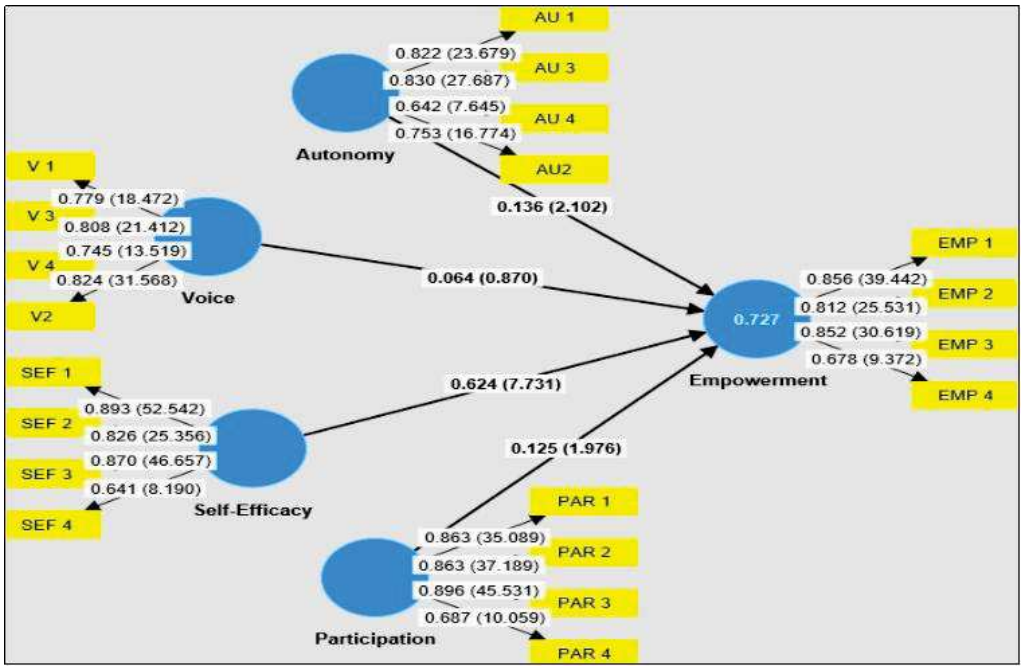

Fig. 3. SEM showing youths' empowerment status based on YADT

Source: authors' own calculations.

Table 3. Youth empowerment status based on YADT

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STD)	P values
Autonomy -> Empowerment	0.136	0.144	0.065	2.102**	0.036
Participation -> Empowerment	0.125	0.126	0.063	1.976**	0.048
Self-Efficacy -> Empowerment	0.624	0.616	0.081	7.731***	0.000
Voice -> Empowerment	0.064	0.066	0.074	0.870^{NS}	0.384

Note: *** ($p \leq 0.001$), ** ($p \leq 0.05$), * ($p \leq 0.01$) & NS mean 1, 5, 10% and non-significant, respectively.

Source: Field survey, 2025.

Figure 3 shows that youth empowerment is explained mainly by self-efficacy, which had the strongest positive and significant effect. Autonomy and participation also contributed modest but significant effects, while voice did not significantly influence empowerment. Together, the four constructs explained 72.7% of the variation in empowerment, indicating a strong model fit.

Youths' Agripreneurship Performance in Agribusiness Enterprises

Youths' Agripreneurship performance based on the Youth Agripreneurship Performance Theory (YAPT)

The results in Table 4 (see Figure 4), analysed through the Youth Agripreneurship Performance Theory (YAPT), show that the performance of youth in small agribusiness enterprises in Jigawa State is shaped by several factors, but the strongest driver comes from how well they engage with their customers.

Customer-related factors stood out as the most powerful influence on performance ($\beta = 0.428$, $p < 0.001$). Youth who focus on meeting customer needs, maintaining quality, and building trust are significantly more successful in sustaining their businesses. This finding makes it clear that customer satisfaction and loyalty are the real backbone of youth agribusiness performance in Jigawa State, echoing Adeyanju et al. (2021a), who also found that youth training programmes strengthened market engagement skills.

By comparison, finance showed a positive but statistically insignificant effect ($\beta = 0.143$, $p = 0.133$). While access to money is undeniably important, the results suggest that financial resources are either too limited or not being used effectively enough to make a clear difference. This reflects broader challenges in youth agribusiness across Africa (Adesina & Eforuoku, 2017), where small, high-interest loans and poor repayment structures often blunt the potential of finance to truly boost performance. In practice, this suggests that simply giving youth credit is not enough—financial literacy and efficient capital use are equally essential.

Growth-related factors also showed a significant positive effect ($\beta = 0.159$, $p = 0.093$). This means that while some youths are expanding into new products, markets, or larger scales of operation, these efforts are strong enough to drive measurable performance improvements. This likely reflects the early stage of most agribusiness ventures in Jigawa State, where stabilising market presence comes before large-scale expansion. Adeyanju (2023) highlighted how growth becomes possible when structural supports are present, but in Jigawa State, barriers like poor infrastructure and limited capital still constrain this potential.

A similar picture emerges with operational efficiency (β = 0.143, p = 0.072). Youth who manage their production processes, supply chains, and resources more effectively do perform better. YAPT emphasises that operations are critical for long-term competitiveness, but in Jigawa State, most enterprises lack the technology, training, and standardised processes to make efficiency gains transformative. The diagnostic test results showed the fitness of the CFA for the specified theories, as evidenced by its test results that are within the acceptable threshold values (Table 6).

These findings suggest that youth agripreneurs in Jigawa State are currently strongest in their market relationships, growth, and operational efficiency, while finance remains underdeveloped. This is different from other African contexts (Garbero & Jackering, 2021), where more intensive support programmes have led to measurable increases in income and food security.

In the Jigawa State context, therefore, the immediate priority should be to build on customer engagement by investing in marketing, branding, and customer service skills. At the same time, longer-term strategies should focus on strengthening financial literacy and capital utilisation, creating better pathways for sustainable growth, and improving operational efficiency through targeted technologies and training. From a YAPT perspective, Jigawa State's youth are showing promise in how they connect with the market, but their enterprises still need stronger financial, structural, and operational foundations to achieve sustained growth and competitiveness.

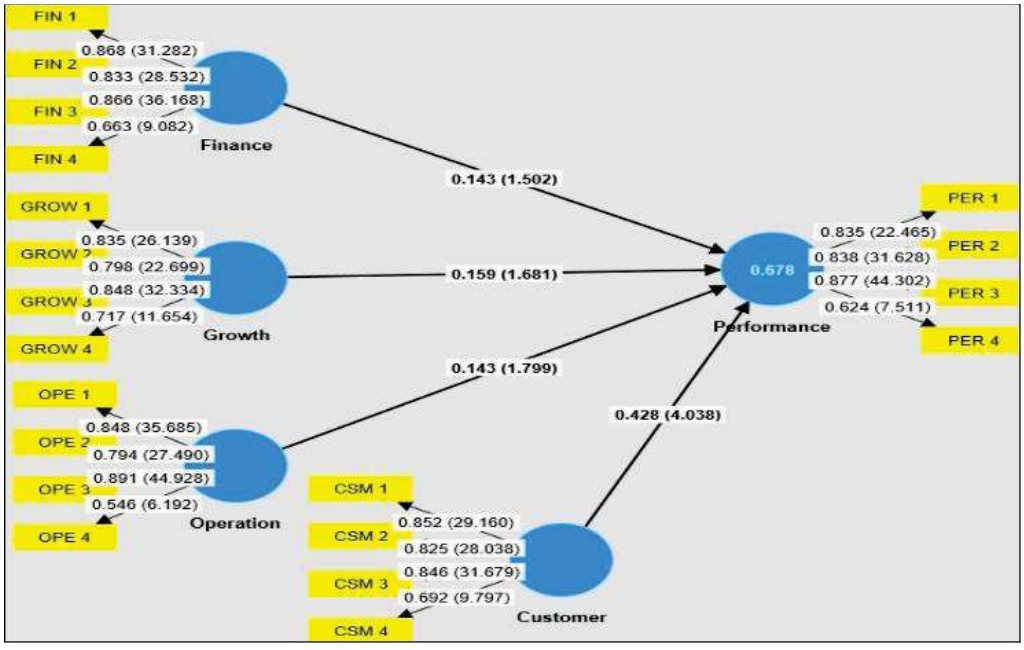

Fig. 4. SEM showing youths' agripreneurship performance based on YAPT

Source: authors' own calculations.

Table 4. Youth empowerment status based on YADT

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STD)	P values
Customer -> Performance	0.428	0.414	0.106	4.038***	0.000
Finance -> Performance	0.143	0.150	0.095	1.502NS	0.133
Growth -> Performance	0.159	0.164	0.095	1.681*	0.093
Operation -> Performance	0.143	0.147	0.079	1.799*	0.072

Note: *** ($p \leq 0.001$), ** ($p \leq 0.05$), * ($p \leq 0.01$) & NS mean 1, 5, 10% and non-significant, respectively.

Source: Field survey, 2025.

Youths' Agripreneurship Performance based on the Agripreneurship Resource Construct/Theory (ARC)

The findings presented in Table 5 (see Figure 5) highlight how different resources shape agripreneurial performance among youth in Jigawa State, using the Agripreneurship Resource Construct (ARC). The results show that resources contribute in varying degrees.

Financial resources recorded a negative but non-significant effect on performance ($\beta = -0.08$, $p = 0.264$), indicating that access to finance alone does not guarantee business success. This outcome reflects challenges of misallocation, debt burdens, and low financial literacy. Adeyanju et al. (2021a) similarly observed that without capacity building and mentorship, financial support fails to translate into improved outcomes. Comparable findings in rural Africa (Adesina & Eforuoku, 2017) further confirm that finance works only when coupled with training and supportive structures.

Human resources had a strong and highly significant influence ($\beta = 0.342$, $p = 0.000$), underscoring the importance of technical skills, business acumen, and problem-solving ability in driving performance. This finding resonates with Adeyanju et al. (2021a), who emphasised the role of skill-development programmes in boosting youth-led enterprises; and Okolo-obasi &Uduji (2023), who highlighted passion-driven learning as critical for sustained agribusiness engagement.

Physical resources also contributed positively and significantly ($\beta = 0.228$, $p = 0.011$). Access to productive assets such as land, storage, and equipment enhances efficiency, reduces post-harvest losses, and improves product quality. However, infrastructural constraints in Jigawa limit the full potential of physical capital. This finding aligns with Twumasi et al. (2019), who identified inadequate infrastructure as a core bottleneck for African youth agripreneurs, suggesting the need for targeted support such as leasing schemes, shared cooperatives, and input subsidies.

Social resources emerged as the strongest predictor of performance ($\beta = 0.422$, $p = 0.000$). Networks, mentorship, and trust-based relationships provide access to markets, collective bargaining power, and resilience against shocks. This confirms Adeyanju et al. (2021a), who found that collaborative youth programmes yielded stronger outcomes, particularly where institutional support was weak. In Jigawa State, social capital plays a pivotal role in sustaining agribusiness ventures by compensating for gaps in finance and infrastructure.

In summary, Table 4.3.2 shows that agripreneurial performance in Jigawa State depends more on social ($\beta = 0.422$) and human ($\beta = 0.342$) resources, supported by physical capital

(β = 0.228), while financial capital (β = –0.08) remains insignificant on its own. These findings mirror broader African evidence (Okolo-obasi & Uduji, 2023; Adeyanju et al., 2021a; Adesina & Eforuoku, 2017), reinforcing that youth agripreneurship thrives not simply through financial support but through a balanced mix of skills, networks, and assets. The diagnostic statistical tests justify the appropriateness of the SEM model in explaining the specified theory, as all are within the plausible acceptable values.

Table 5. Youths' agripreneurship performance based on ARC/T

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STD)	T statistics (O/STD)	P values
Financial -> Performance	-0.081	-0.081	0.072	1.117^{NS}	0.264
Human -> Performance	0.342	0.340	0.070	4.912***	0.000
Physical -> Performance	0.228	0.233	0.089	2.556**	0.011
Social -> Performance	0.422	0.420	0.076	5.550***	0.000

Note: *** ($p \leq 0.001$), ** ($p \leq 0.05$), * ($p \leq 0.01$) & NS mean 1, 5, 10% and non-significant, respectively.

Source: Field survey, 2025.

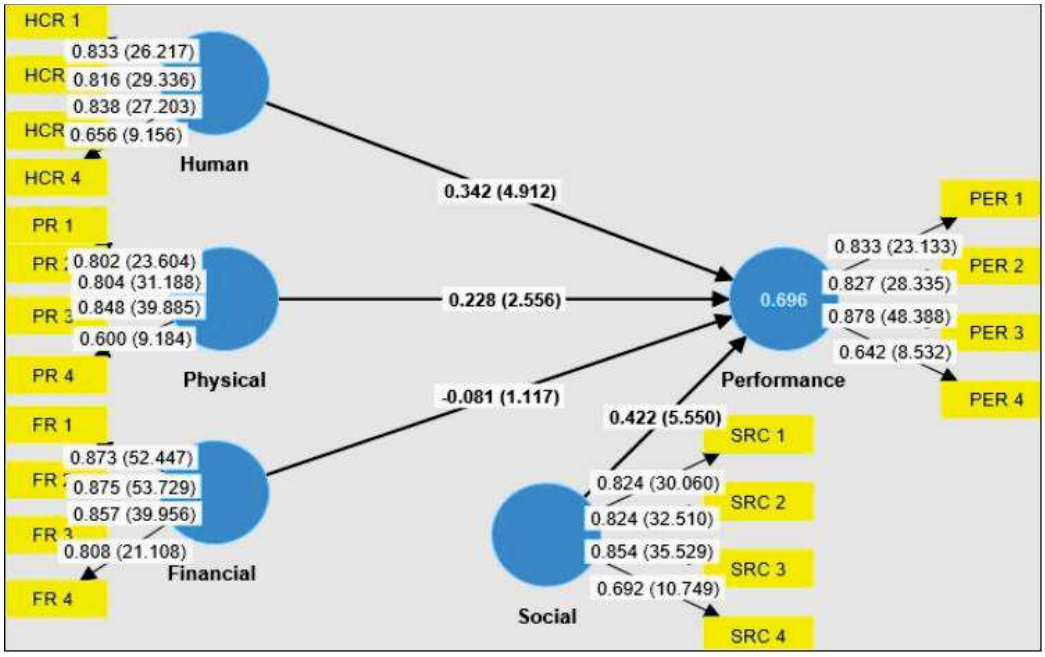

Fig. 5. SEM showing youths' agripreneurship performance based on ARC/T

Source: authors' own calculations.

Table 6. Diagnostic test results of SEM

Tests	Estimated model				Recommendation
	AEDT	YADT	YAPT	ARC	
SRMR	0.080875932	0.084798528	0.078093904	0.068689293	<0.08
d_ULS	1.373592428	1.510065964	1.280718133	0.990825984	-
d_G	0.509314806	0.513262012	0.625071511	0.443710927	-
Chi-square	852.2674299	861.386558	929.2577582	681.7170816	0.01
NFI	0.945345451	0.93554464	0.962371704	0.995809143	> 0.90

Source: SMART-PLS software, 2025.

Conclusion and Recommendations

Conclusion

The study reveals that youth empowerment in agribusiness is multidimensional but uneven. Psychological empowerment and self-efficacy are the most critical drivers, indicating that internal confidence and resilience are foundational to success. Political empowerment and autonomy also contribute significantly, enabling youth to navigate systemic barriers and make independent decisions.

However, economic empowerment and financial resources show limited direct impact, suggesting that monetary support alone is insufficient without complementary skills and structures. Social empowerment and voice remain underdeveloped, hindered by cultural norms and weak institutional platforms that limit youth influence and collective advocacy.

Regarding performance, customer engagement and social resources (e.g. networks, mentorship) are the strongest predictors of success. Human resources (skills and knowledge) and physical assets also play vital roles, while financial capital alone does not significantly enhance performance without proper management and support systems.

In summary, youth agripreneurs in Jigawa State are most empowered and successful when they possess strong internal drive, supportive networks, and market-oriented skills—not just financial capital.

Recommendations

1. Strengthen Psychological and Self-Efficacy Development
   - Introduce mentorship programmes, role models, and resilience training.
   - Integrate entrepreneurial mindset education into agricultural training curricula.
2. Enhance Political Inclusion and Autonomy
   - Institutionalise youth representation in agricultural policy-making bodies.
   - Reduce bureaucratic barriers and increase youth involvement in resource allocation decisions.
3. Improve Economic and Financial Support Systems
   - Bundle financial aid with capacity-building programmes (e.g. financial literacy, business management).
   - Develop youth-friendly loan products with flexible repayment terms.

4. Boost Social Capital and Voice
    - Facilitate youth cooperatives and networks to strengthen collective bargaining and knowledge sharing.
    - Offer leadership and advocacy training to amplify youth voices in policy and community forums.
5. Support Market-Led and Resource-Based Performance
    - Provide training in customer relationship management, branding, and digital marketing.
    - Improve access to physical resources (e.g. shared equipment, storage facilities) through leasing or cooperative models.
    - Prioritise skill development in technical, managerial, and operational areas.
6. Adopt Integrated and Youth-Sensitive Policies
    - Design holistic interventions that address psychological, social, economic, and political dimensions simultaneously.
    - Ensure programmes are youth-responsive, participatory, and context-specific to Jigawa State.

By implementing these recommendations, stakeholders can foster a more enabling environment for youth to thrive as empowered, resilient, and successful agripreneurs.

References

Abdullahi, A.G., Umar, S., Manuwa, A., Zakari, A., Abubakar, A.A. (2025). Analysis of the factors influencing agricultural students' willingness to partake in agripreneurship in North-Western Nigeria. *Nigerian Journal of Agriculture and Agricultural Technology*, 5(2A), 1-9.

Abraham, T.H., Stewart, G.L., Solimeo, S.L. (2021). The importance of soft skills development in a hard data world: learning from interviews with healthcare leaders. *BMC Medical Education*, 21(1), 147.

Adesina, T.K., Eforuoku, F. (2017). Determinants of participation in youth-in-agriculture programme in Ondo State, Nigeria. *Journal of Agricultural Extension*, 20(2), 104-117. http://dx.doi.org/10.4314/jae.v20i2.8

Adeyanju, D.F. (2023). Impact of Agribusiness Empowerment Interventions on Skills Development and Livelihood Outcomes: Evidence From the Enable Programme in Africa (Doctoral dissertation, University of Nairobi).

Adeyanju, D., Mburu, J., Mignouna, D. (2021b). Youth agricultural entrepreneurship: Assessing the impact of agricultural training programmes on performance. *Sustainability*, 13(4), 1697.

Adeyanju, D., Mburu, J., Gituro, W., Chumo, C., Mignouna, D., Mulinganya, N. (2023). Impact of agribusiness empowerment interventions on youth livelihoods: Insight from Africa. *Heliyon*, 9(11).

Adeyanju, D., Mburu, J., Mignouna, D., Akomolafe, K.J. (2021a). Determinants of youth participation in agricultural training programs: the case of Fadama program in Nigeria. *International Journal of Training* Research, 19(2), 142-166.

Akrong, R., Kotu, B.H. (2022). Economic analysis of youth participation in agripreneurship in Benin. *Heliyon*, 8(1).

Awobajo, O., Lawal, Y.O., Alase, P.O. (2025). Effect of agribusiness clusters and youth policy engagement on promoting sustainable agricultural practices among young agripreneurs in Southwest Nigeria. *ABUAD Journal of Social and Management Sciences*, 6(1), 39-57.

Awotodunbo, A.A., Adetola, A., Omotomiwa, A., Adebayo, A.S., Aline, M.M., Samuel, O.D. (2025). The achievement of rural youth employment opportunities: support to integrated agribusiness hubs project in Nigeria, implication for sustainable development. *International Journal of Agricultural and Veterinary Science*, 7(1). https://doi.org/10.70382/mejavs.v7i1.026.

Babu, S., Zhou, Y., Koever, L., Srivastava, N. (2020). Youth entrepreneurship in agribusiness. Nigeria Country Report; International Food Policy Research Institute: Abuja, Nigeria.

Benton, D.H. (2025). Leadership Emergence Among Black Urban Women Survivors of Intimate Partner Violence: A Qualitative Exploration. https://digitalcommons.acu.edu/etd/927/

Boye, M., Ghafoor, A., Wudil, A.H., Usman, M., Prus, P., Feher, A., Sass, R. (2024). Youth engagement in agribusiness: perception, constraints, and skill training interventions in Africa: A systematic review. *Sustainability*, 16(3), 1096.

Brooks, K., Zorya, S., Gautam, A., Goyal, A. (2013). Agriculture as a sector of opportunity for young people in Africa. World Bank Policy Research Working Paper, (6473).

Chiang, S.N. (2023). Many "New" Green Revolutions?–Unearthing the Coexistence of Agrifood Solutions to Malnutrition in the Philippines (Doctoral dissertation, University of California, Santa Cruz).

Consentino, F., Vindigni, G., Spina, D., Monaco, C., Peri, I. (2023). An agricultural career through the lens of young people. *Sustainability*, 15(14), 11148.

Falaye, A.J. (2020). The impact of socio-economic factors on Ekiti State's youth participation in agriculture. In: 35th International Business Information Management Association Conference, 1 - 2 April 2020, Spain

Garbero, A., Jäckering, L. (2021). The potential of agricultural programs for improving food security: A multi-country perspective. *Global Food Security*, 29, 100529.

Geza, W., Ngidi, M., Ojo, T., Adetoro, A.A., Slotow, R., Mabhaudhi, T. (2021). Youth participation in agriculture: A scoping review. *Sustainability*, 13(16), 9120.

Haji, L., Valizadeh, N., Karimi, H. (2022). The effects of psychological capital and empowerment on entrepreneurial spirit: The case of Naghadeh County, Iran. *International Journal of Finance & Economics*, 27(1), 290-300.

Herani, R., Pranandari, A. (2024). Promote or inhibit? Examining the influence of youth digital advocacy on digital social entrepreneurship. *Social Enterprise Journal*, 20(5), 654-677.

Ikebuaku, K. (2021). Youth agricultural entrepreneurship as a vehicle for employment creation in Nigeria: A capability approach. https://uwcscholar.uwc.ac.za/items/39096fe9-eb29-42e8-963f-96c623e96cfd

Isaacs, E., Visser, K., Friedrich, C., Brijlal, P. (2007). Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African Journal of Education*, 27(4), 613-629.

Kansiime, M.K., Aliamo, C., Alokit, C., Rware, H., Murungi, D., Kamulegeya, P., ... Kusasira Mulema, J.M. (2025). Pathways and business models for sustainable youth employment in agriculture: A review of research and practice in Africa. *Agriculture Bioscience*, 6(1), 0045.

Kiprono, K. (2024). Youth Participation in Agriculture and Its Effect on Welfare: The Case of Youth in Bomet County, Kenya (Doctoral dissertation, Kenyatta University).

Kote, P., Yallapa, M., Jabeen, A., Srinatha, T.N., Prabhavathi, S.J., Ramasamy, M., ... Malathi, G. (2024). A scoping review on youth participation in agriculture: sustainable development, food security, and economic growth. *Journal of Scientific Research and Reports*, 30(5), 947-58.

Magagula, B., Tsvakirai, C.Z. (2020). Youth perceptions of agriculture: influence of cognitive processes on participation in agripreneurship. *Development in Practice*, 30(2), 234-243.

Msangi, H.A., Waized, B., Ndyetabula, D.W., Manyong, V.M. (2024). Promoting youth engagement in agriculture through land titling programs: Evidence from Tanzania. *Heliyon,* 10(7).

Ninson, J., Brobbey, M.K. (2023). Review on engaging the youth in agribusiness. *Cogent Social Sciences*, 9(1), 2193480. https://doi.org/10.1080/23311886.2023.2193480

Nuhu, L.Y. (2021). The impact of entrepreneurship education on developing students entrepreneurial attitudes and intention in emerging economies: An Assessment of the Nigeria Case (Doctoral dissertation, University of Worcester).

Okolo-obasi, N.E., Uduji, J.I. (2023). Does agri-business/small and medium enterprise investment scheme (AGSMEIS) impact on youth entrepreneurship development in sub-Saharan Africa? Evidence from Nigeria. *Journal of Economic and Administrative Sciences*, 39(3), 571-595.

Osabohien, R., Wiredu, A.N., Nguezet, P.M.D., Mignouna, D.B., Abdoulaye, T., Manyong, V., ... Awotide, B.A. (2021). Youth participation in agriculture and poverty reduction in Nigeria. *Sustainability*, 13(14), 7795.

Ouko, K.O., Ogola, J.R.O., Ng'on'ga, C.A., Wairimu, J.R. (2022). Youth involvement in agripreneurship as Nexus for poverty reduction and rural employment in Kenya. *Cogent Social Sciences*, 8(1), 2078527.

Ray, P., Panigrahi, R.S., Mohapatra, B.P. (2022). Prioritising agripreneurial skills required for farm youth: a fuzzy analytic hierarchy approach. *Journal of Agricultural Science and Technology*, 24(3), 567-578.

Sadiq, M.S., Sani, B.S. (2023). Job satisfaction and agripreneurial success of microfinance beneficiary small-scale rice processors in Nigeria's Jigawa state. *Siembra*, 10(1).

Sadiq, M.S., Ahmad, M.M., Gama, E.N., Sambo, A.A. (2024b). Economic efficiency of small-scale wheat production in Jigawa state, Nigeria. *Siembra*, 11(1), e5570-e5570.

Sadiq, M.S., Salihu, M., Sani, B.S. (2024a). Prospects of small-scale rice processing enterprise among beneficiaries of microfinance loan in Nigeria's Jigawa State. *Problems of World Agriculture*, 24(2), 4-21.

Sadiq, M.S., Sani, B.S. (2024). Inequality and social welfare status of paddy rice processors in Nigeria's Jigawa state. *Sustainability, Agri, Food and Environmental Research*, 12 (2), 1-23

Shaari, R., Samah, I.H.A., Zhurad, M., Haron, J.Y. (2025). Key factors influencing youth engagement in Malaysia's agricultural sector. *International Journal of Academic Research in Business and Social Sciences*, 15(2). http://dx.doi.org/10.6007/IJARBSS/v15-i2/24751

Songca, S.S., Henning, J.I.F., Madende, P. (2024). Livelihood assets influence on rural youth participating in support initiatives to enhance agricultural participation. *South African Journal of Agricultural Extension*, 52(4), 17-46.

Stanley, O.A., Tochi, I. (2025). Assessing the impact of ecopreneurship on sustainability in the agrifood industry: insights from agripreneurs in South West, Nigeria. *People*, 9(4), 248-260.

Twumasi, M.A., Jiang, Y., Acheampong, M.O. (2019). Determinants of agriculture participation among tertiary institution youths in Ghana. *Journal of Agricultural Extension and Rural Development*, 11(3), 56-66.

Appendix

Appendix A: Youths' Empowerment Status based on the Agripreneurship Empowerment Dimension Theory (AEDT)

	Construct reliability and validity			
Overview	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Economic	0.769	0.803	0.850	0.590
Empowerment	0.814	0.852	0.876	0.641
Political	0.827	0.860	0.883	0.657
Psychological	0.805	0.834	0.872	0.633
Social	0.797	0.878	0.862	0.625

Source: SMART-PLS software, 2025.

Appendix B: Youths' empowerment status based on the Youth Agency Dimension Theory (YADT)

	Construct reliability and validity			
Overview	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Autonomy	0.764	0.787	0.848	0.586
Empowerment	0.814	0.834	0.878	0.644
Participation	0.850	0.880	0.899	0.691
Self-Efficacy	0.826	0.856	0.885	0.662
Voice	0.799	0.805	0.869	0.623

Source: SMART-PLS software, 2025.

Appendix C: Youths' Agripreneurship Performance based on the Youth Agripreneurship Performance Theory (YAPT)

Construct reliability and validity				
Overview	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Customer	0.820	0.835	0.881	0.651
Finance	0.824	0.844	0.884	0.659
Growth	0.813	0.821	0.877	0.642
Operation	0.783	0.835	0.859	0.610
Performance	0.808	0.840	0.875	0.639

Source: SMART-PLS software, 2025.

Appendix D: Youths' Agripreneurship Performance based on the Agripreneurship Resource Construct/Theory (ARC)

Construct reliability and validity				
Overview	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial	0.876	0.879	0.915	0.729
Human	0.795	0.809	0.868	0.623
Performance	0.808	0.830	0.875	0.640
Physical	0.764	0.782	0.851	0.592
Social	0.814	0.832	0.877	0.642

Source: SMART-PLS software, 2025.

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